

**REMARKS**

An excess claim fee payment letter is submitted herewith for four (4) excess independent claims and eighteen (18) excess total claims.

Claims 1-38 are all the claims presently pending in the application. Claims 1, 2, and 4 are amended to define more clearly the features of the claimed invention. Claims 1-8 also have been amended to make editorial changes in conformance with U.S. patent practice. Claims 9-38 have been added to provide more varied protection for the invention and to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability.

Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-8 stand rejected on prior art grounds. With respect to the prior art rejections, claims 1, 2, 5, and 7 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kagawa (U.S. Patent No. 5,687,094). Claims 3, 4, 6, and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kagawa in view of Miyakawa (U.S. Patent No. 6,226,092).

These rejections are respectfully traversed in the following discussion.

## **I. THE CLAIMED INVENTION**

The claimed invention is directed to a bug (i.e., a problem or defect part) collection apparatus and a method of collecting bug information.

In an illustrative, non-limiting embodiment of the present invention as defined by independent claim 1, an apparatus for collecting bug information when a design modification is made to a bug in a drawing designed by using a computer aided design system, includes a first means for detecting whether the modification to the bug exceeds a pre-established criterion and a second means for collecting and recording a bug information corresponding to the modification when the first means detects that the modification exceeds the pre-established criterion.

In another exemplary embodiment of the invention as defined by independent claim 5, a method for collecting bug information when a design modification is made to a bug in a drawing designed by using a computer aided design system includes detecting whether or not the modification to the bug exceeds a pre-established criterion and collecting a bug information corresponding to the modification when an information including the modification exceeding the pre-established criterion is detected in the detecting.

Other exemplary embodiments of the invention, which recite features that are somewhat similar to those recited in claims 1 and 5, are defined by independent claims 4 and 6-8.

The claimed invention provides a simple configuration that is easily implemented and that performs automatic collection of design bug information when a

design modification is made (i.e., at the time the design modification is made) to the drawing, without human intervention (e.g., see specification at page 5, lines 25-28).

## II. CLAIM REJECTIONS BASED ON PRIOR ART GROUNDS

### A. Claims 1, 2, 5, and 7:

Claims 1, 2, 5, and 7 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kagawa. For at least the following reasons, Applicant respectfully traverses this rejection.

Independent claim 1 recites, *inter alia*, a “bug collection apparatus for collecting bug information when a design modification is made to a bug in a drawing designed by using a computer aided design system” (emphasis added). The claimed apparatus detects whether a modification exceeds a pre-established criterion, and collects and records “bug information corresponding to said modification when said first means detects that said modification exceeds said pre-established criterion” (emphasis added).

Thus, the claimed invention provides a simple configuration that is easily implemented and that performs automatic collection of design bug information when a design modification is made. That is, the claimed invention collects bug information at the time the design modification is made to the drawing, not at the end of all modifications.

In contrast to the claimed invention, Kagawa does not disclose or suggest an apparatus that automatically collects bug information when a design modification is made to a bug in a drawing. That is, Kagawa does not automatically detect whether a

modification exceeds a pre-established criterion at the time the change is made or, in other words, each time a change is made.

Instead, Kagawa discloses a verification process that is performed at the end of the design modification process to verify whether the design will yield a product which will satisfy the product specifications (e.g., see Kagawa at column 1, lines 5-10). That is, Kagawa generates a list of specification items that must be verified and a verification list which is then verified at a later time (i.e., after all of the changes to the drawings, specifications, and tolerances have been made).

For example, as shown in the Figure of Kagawa, the design data (e.g., see the Figure of Kagawa at step 5) and the specification items (e.g., see step 8) are used to generate a verification list (e.g., see step 10). After the list has been generated, the list is evaluated and verified (e.g., see steps 11-19). Upon completion of the verification process, a report is generated (e.g., see steps 22-22).

Thus, Kagawa does not disclose or suggest the novel and unobvious apparatus and method according to the present invention in which bug information is automatically and instantaneously detected, collected, and recorded when each modification exceeds the pre-established criterion.

Applicant respectfully submits that Kagawa neither discloses nor suggests all of the recitations of independent claim 1.

Similarly, independent claims 5 and 7 recite, *inter alia*, a method for collecting bug information when a design modification is made to a bug in a drawing designed by using a computer aided design system. Thus, for similar reasons, Applicant

respectfully submits that Kagawa neither discloses nor suggests all of the features of independent claims 5 and 7.

Accordingly, Applicant requests that the Examiner withdraw the rejection of claims 1, 2, 5, and 7.

**B. Claims 3, 4, 6, and 8:**

Claims 3, 4, 6, and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kagawa in view of Miyakawa.

As mentioned above, Kagawa does not disclose or suggest the novel and unobvious apparatus and method according to the present invention in which bug information is detected, collected, and recorded when each modification exceeds the pre-established criterion.

On the other hand, Miyakawa similarly does not disclose or suggest the novel and unobvious apparatus and method according to the present invention in which bug information is detected, collected, and recorded when each modification exceeds the pre-established criterion. Indeed, the Office Action does not even rely on Miyakawa for such a disclosure.

Thus, Applicant submits that neither Kagawa nor Miyakawa, either alone or in combination, discloses or suggests the novel and unobvious combination of features recited in the claimed invention, and therefore, requests that the Examiner withdraw the rejection of claims 3, 4, 6, and 8.

### **III. NEW CLAIMS**

New claims 9-38 are added to provide more varied protection for the present invention, as disclosed in the original specification and drawings.

Applicant submits that claims 9-38 are patentable over the cited references for reasons similar to those set forth above, as well as for the additional features recited therein.

### **IV. FORMAL MATTERS AND CONCLUSION**

The Office Action objects to the specification. The specification is amended as suggested by the Examiner, thereby obviating the objection. Accordingly, the Examiner is requested to withdraw this objection.

The Office Action objects to claims 1, 2, and 4 because of informalities. Claims 1, 2, and 4 are amended herewith, as suggested by the Examiner. Accordingly, Applicants request that the Examiner withdraw the objection to these claims.


In view of the foregoing, Applicant submits that claims 1-38, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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John J. Dresch, Esq.  
Registration No. 46,672

Sean M. McGinn  
Registration No. 34,386

**McGinn & Gibb, PLLC**  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
**Customer No. 21254**